

REMARKS

This is in full and timely response to the second Office Action dated February 26, 2003. Reconsideration and reexamination are respectfully requested in view of the foregoing amendment and the following remarks.

By the foregoing amendment, claims 1, 6, 7 and 16 to 20 have been amended. Claims 1 to 20 remain pending in this application. No claims have yet been indicated allowable by the Examiner.

The specification has been amended at page 5, line 31, to change “mV” (both occurrences), into --V--. This change was necessary to correct an inadvertent typographical error in the original preparation of the application, and to correctly state the range of voltages used in the first embodiment of the Applicants’ invention. Corresponding corrections were also made to claims 6 and 7. In this same paragraph, the reference numeral “150” on page 5, line 28, has been changed into --152-- to correct a typographical error regarding the plasma sputter chamber 152 shown in Fig. 3.

Claims 1, 9, and 16 to 20 stand rejected under 35 U.S.C. 102(e) as allegedly being anticipated by Browning et al. (U.S. Patent No. 6,409,564). To the extent that this rejection might still be applied to the claims as amended, it is respectfully traversed for the following reasons.

Browning et al. discloses a method for cleaning phosphor screens for use with field emission displays. The method of Browning et al. is primarily directed to the removal of

oxygen or sulfur from the surface of the phosphor. The method of Browning et al. includes the steps of (1) providing a phosphor coated screen in an evacuated chamber, (2) exposing the screen to electron energy, (3) baking the screen in atmospheric conditions after exposure to electron energy, and (4) disposing the screen in a display device and sealing the display device after baking. These process steps are recited in each of Browning et al.'s independent claims, and are described, for example, in column 5, line 53, through column 6, line 56.

In contrast, the Applicants' invention recited in independent claims 1 and 16 to 19 includes the steps of (1) providing a baseplate and a faceplate, (2) desorption processing the faceplate in a vacuum, (3) merging the baseplate and the faceplate while still in the vacuum after the desorption processing, and (4) sealing the vacuum between the baseplate and the faceplate. Since the desorption processing (i.e., pre-aging), the merge of the baseplate and the faceplate, and the sealing are all performed in a vacuum, a separate evacuation step is not required with the Applicants' invention. Specifically, the Applicants' claimed invention recited in each of independent claims 1 and 16 to 19, as amended, differs from Browning et al.'s process by reciting that the base plate and the faceplate are merged while still in the vacuum after the desorption processing.

With regard to Applicants' independent claim 20, it is respectfully submitted that Browning et al. does not disclose a method of manufacturing a flat panel display in which desorption processing of the faceplate is performed after the baseplate and the faceplate are merged together. Instead, Browning et al. expressly teaches away from such a process in column

6, lines 23 to 32, wherein it is stated “the scrubbing is accomplished ... prior to the assembly and sealing of the display.” As described above, Browning et al.’s process involves baking the screen in atmospheric conditions after exposure to electron energy, and sealing the display device after baking.

Claim 20 is directed to the Applicants’ third embodiment described on page 6, lines 18 to 23, of the specification. In this embodiment, the normal manufacturing steps are used for merging the faceplate and baseplate, sealing, and evacuation. However, during evacuation (after the baseplate and faceplate are merged), the faceplate is subject to desorption processing by pre-aging using electron irradiation to accelerate gassing. This is quite different from the process disclosed by Browning et al. where the scrubbing is accomplished before the faceplate and baseplate are assembled.

For at least these reasons, it is respectfully submitted that Browning et al. fails to anticipate the Applicants’ revised claims 1, 9 and 16 to 20. Accordingly, reconsideration and withdrawal of the rejection of these claims under 35 U.S.C. 102(e) based on Browning et al. are respectfully requested.

Claims 2 to 8 and 10 to 15 stand rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Browning et al. (U.S. Patent No. 6,409,564). The Examiner contends that Browning et al. discloses the claimed invention, except for the various process parameters listed in these claims. The Examiner further contends that it would have been obvious to use the claimed parameters because such would be considered mere discovery of an optimum value of a

result effective variable. To the extent that this rejection might still be applied to the claims as amended, it is respectfully traversed for the following reasons.

Claim 2 depends upon claim 1 and recites that the step of desorption processing “uses a vacuum from 10^{-7} to 10^{-8} torr.” The Examiner contends that the use of such a vacuum involves only routine skill in the art as discovering a result effective variable. Claims 6 to 8, 10, 13 and 15 depend directly or indirectly upon claim 1 and also recite features of the Applicants’ invention which are considered by the Examiner as obvious result effective variables. However, in the absence of any prior art teaching, suggesting, or enabling the making of a faceplate by preassembly desorption processing in a vacuum followed by merging of the baseplate and the faceplate while remaining in the vacuum, as recited in claim 1, it is respectfully submitted that no finding of result effective variations are appropriate.

With regard to Applicants’ claim 14 (now rewritten in independent form), it is respectfully submitted that Browning et al. does not disclose a method of manufacturing a flat panel display in which desorption processing or “pre-aging” of the faceplate is performed after the baseplate and the faceplate are merged together. Instead, Browning et al. expressly teaches away from such a process in column 6, lines 23 to 32, wherein it is stated “the scrubbing is accomplished … prior to the assembly and sealing of the display.”

Accordingly, reconsideration and withdrawal of the rejection of claims 2 to 8 and 10 to 15 under 35 U.S.C. 103(a) based on Browning et al. are respectfully requested.

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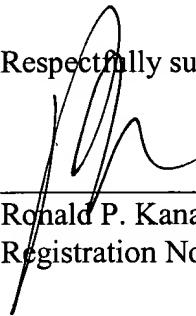
PATENT APPLICATION

Applicants respectfully submit that all of the pending claims 1 to 20 are now in condition for allowance, and request that a timely Notice of Allowance be issued for this application.

If the Examiner has any comments or suggestions that could place this application into even better form, the Examiner is encouraged to contact the Applicants' undersigned representative at the telephone number listed below.

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Respectfully submitted by:


Ronald P. Kananen
Registration No. 24,104

RADER, FISHMAN & GRAUER, P.L.L.C.

1233 20th Street, N.W.
Suite 501
Washington, D.C. 20036
Telephone: 202-955-3750
Facsimile: 202-955-3751
Customer No. 23353